Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



152 C 2

United States Department of Agriculture.

SECTION OF VEGETABLE PATHOLOGY.

CIRCULAR No. 9.

ROOT-ROT OF COTTON.

DEAR SIR:

For the purpose of obtaining some definite information in regard to the distribution, extent of injury and conditions favoring this disease the following circular has been prepared; it is earnestly hoped that you will give it your early attention, answering the questions, so far as you are able, and returning the replies to this office.

The disease is first manifested by the sudden wilting of cotton plants here and there in fields, such plants becoming dry in a few days. This appearance is first noticed about the middle of June, and continues till frost. It is variously known as "Cotton Blight," "Frenching," "Dead Spots," "Alkali," or simply "Dying of Cotton," and is distinguished from Cotton Rust in that in the former disease the root is always in a decaying condition or else rotten when the leaves are dry. When the plants are just wilting, especially after rains, the tap-root as well as the lateral rootlets are found to be covered with a brownish mould-like fungus. In Cotton Rust, especially after rains, the stalk throws out new leaves and branches, while the falling leaves have what planters call a "rusty look."

1. Have you noticed	d this disc	ease (the	Root-Rot)?	If so, please
make an estimate of the ai	mount of c	eotton dest	royed by it in	your county.
			1	
•••••	• • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	
•••••		• • • • • • • • • • • • • • • • • • • •		
	// < ?	RECEIVED	19	
•••••		RECEIVED	44/	
	Man NI	Wood	000	

2. Have you noticed cotton dying in the alluvial bottoms?
3. What is the nature of the soil where cotton is thus affected?
4. What is the nature of the sub-soil?
5. What is the nature of the rock-stratum upon which the surfact soil lies, and how far is it from the surface?
6. Have you noticed any other plants dying in the same way?
7. Do forest trees and apple trees suffer severely from this disease
8. Have you noticed any weeds dying in the same way, and if so will you please make out a list of them?
······································
,

9. Please send specimens of plants affected with <i>Root-Rot</i> , especially cotton. On application, franks will be furnished for this purpose.
•••••••••••••••••••••••••••••••••••••••
10. Has the application of commercial fertilizers, wood ashes or barnyard manure proved beneficial?

11. Have you drained any of the soil upon which cotton dies? If so, does it seem to alleviate the trouble?
······································
•••••••••••••••••••••••••••••••••••••••
12. Has sub-soiling a beneficial influence?
13. In what part of the field does cotton seem to suffer most from this disease, on more or less level ridges, on hill-slopes, at their bases, or on level land?
•••••••••••••••••••••••••••••••••••••••
••••••
14. Do the Dead Spots seem to increase or diminish in size when rotation of crops is practiced?
•••••••••••••••••••••••••••••••••••••••

15. Have you noticed the falling over of corn, oats, wheat or sorghum when grown on such spots following cotton or sweet pototoes?
16. How does it affect sweet potatoes?
REMARKS.

Name:
Post Office:
County:
State:

Respectfully,

J. M. RUSK,
Secretary of Agriculture.